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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,738	04/26/2005	Marcus Burgel	2002P16717WOUS	9005

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Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
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EXAMINER

WONG, JOSEPH D

ART UNIT PAPER NUMBER

2168

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/532,738

Applicant(s)

BURGEL ET AL.

Examiner

Joseph D. Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 Apr. 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8-24 rejected for being directed towards nonstatutory subject matter.

Claim 8 appears directed a system comprising abstract elements per se. This claimed subject matter lacks a practical application of a judicial exception (abstract idea) since it fails to produce a useful result. Specifically the claimed subject matter does not produce a tangible result.

The claimed subject matter does not positively recite a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data. More specifically, the claimed subject matter provides for *structuring, storing and processing of data*.

Claims 8 is directed to a system comprised entirely of a collection of abstract elements. To be an actual data structure, it must be “a physical or logical relationship among data elements, designed to support **specific data manipulation** functions, “ regardless of whether Applicant calls it a data structure or not. What applicant has claimed does not appear to meet the IEEE definition of a data structure because it does not appear designed for **specific data manipulation** functions. Specifically “structuring, storing, and processing of data in accordance with a generic object model” appears sufficiently general use due to applicant’s failure to positively recite

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specific data manipulation functions. Claims 9-20 depend from claim 8 and are rejected for the same reason.

Claims 21 and 23 appear directed a method of abstract elements per se. This claimed subject matter lacks a practical application of a judicial exception (abstract idea) since it fails to produce a useful result. Specifically the claimed subject matter does not produce a tangible result.

The claimed subject matter does not positively recite a tangible result because the claimed subject matter fails to produce a result that is limited to having real world value rather than a result that may be interpreted to be abstract in nature as, for example, a thought, a computation, or manipulated data. More specifically, the claimed subject matter produces nothing more than *linked objects*, which does not produce a tangible result.

Claims 22 and 24 depend from claims 21 and 23 respectively and are rejected for the same reason.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8-9, 12-13, 15-17, 19-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Williams, US Patent 6,591,272 B1, filed 22 Feb. 2000.

Regarding claim 8, Williams teaches a system for structuring (interpreted to include "ORGANIZATION", Col. 91, Lines 55), storing (interpreted to include "inserts", Col. 60, Lines 40-45) and processing of data in accordance with a generic object model (Fig. 5), wherein the object model has at least one first element which corresponds to a type object (Fig. 4), wherein the type object (Fig. 4-5) comprises the following attributes (Fig. 14): a unique identification of an object of the type Object for absolute referencing of the object (interpreted to include "CustomerID", Fig. 14), a logical name for labeling the object (interpreted to include "Base Object Name", Fig. 14), and at least one link to a second element (interpreted to include "SalesPersonID", Fig. 14), which corresponds to a type Feature (interpreted to include "Employee_ID", Fig. 15), wherein the type Feature comprises the following attributes: a unique name in relation to the object (interpreted to include "Base Object Name", Fig. 15), and the option of linkage to further components of the type Object (interpreted to include "ManagerID", Fig. 15), to further components of the type Feature (interpreted to include "Employee_ID", Fig. 15), and to data (interpreted to include "LAST_NAME", Fig. 15).

Regarding claim 9, Williams teaches the system in accordance, wherein the type Object has as further attributes an identification of the object type (Fig. 14) and an identification of the version of the object. (Col. 10, Lines 44-45)

Regarding claim 12, Williams teaches the system in accordance, wherein the elements of the object are linked by references. (Col. 11, Line 45; Col. 26, Line 20)

Regarding claim 13, Williams teaches the system in accordance, wherein the elements of the object are linked by references. (Col. 11, Line 45; Col. 53, Lines 5-15)

Regarding claim 15, Williams teaches the system in accordance, wherein the object model is described by an extensible markup language. (interpreted to include "XML", Col. 9, Lines 22-23)

Regarding claim 16, Williams teaches the system in accordance, wherein the object model is described by an extensible markup language. (interpreted to include "XML", Col. 9, Lines 22-23)

Regarding claim 17, Williams teaches the system in accordance, wherein the object model is described by an extensible markup language. (interpreted to include "XML", Col. 9, Lines 22-23)

Regarding claim 19, Williams teaches the system in accordance, wherein the object model is described by an extensible markup language. (interpreted to include "XML", Col. 9, Lines 22-23)

Regarding claim 20, Williams teaches the system in accordance with claim 8, wherein the system is part of an engineering system of an automation system. (Col. 9, Lines 23-24, Lines 37-38; Col. 12, Lines 43-45)

Regarding claim 21, Williams teaches a method for structuring (interpreted to include "ORGANIZATION", Col. 91, Lines 55), storing (interpreted to include "inserts", Col. 60, Lines 40-45) and processing data in accordance with a generic object model (Fig. 5), wherein the object model has at least one first element corresponding to the type Object (Fig. 4-5), wherein the type Object (Fig. 4-5) comprises the following attributes (Fig. 14): a unique identification of an object of the type Object for absolute referencing (interpreted to include the "primary key", Col. 12, Line 58) of the object (interpreted to include "CustomerID", Fig. 14), a logical name for labeling the object (interpreted to include "Base Object Name", Fig. 14), and at least one link to a second element (interpreted to include "SalesPersonID", Fig. 14), which corresponds to a type Feature (interpreted to include "Employee_ID", Fig. 15), the method comprising: assigning a unique identification (interpreted to include "Employee_ID", Fig. 15) to an instance of the type Object for absolute referencing the instance (interpreted to include "Base Object Name", Fig. 15); assigning a logical name for labeling the instance (interpreted to include "BaseObject", Col. 53, Line 30); and linking the instance to the second element (interpreted to include "DEPARTMENT_ID", Col. 60, Lines 50-55), wherein the type Feature comprising the following attributes: a unique name in relation to the relevant linked object referenced, and the option of linkage to further components of the type Object (interpreted to include "JOB_ID",

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Col. 60, Lines 55-60), to further components of the type Feature (interpreted to include "LOCATION_ID", Col. 60, Lines 50-65), and to data (interpreted to include "HIRE_DATE", Col. 60, Lines 50-65).

Regarding claim 22, Williams teaches the method in accordance, wherein the data are structured (Col. 91, Lines 55), stored (Col. 60, Lines 40-45), and processed for engineering an automation system. (Col. 9, Lines 23-24, Lines 37-38; Col. 12, Lines 43-45)

Regarding claim 23, Williams teaches a method for structuring, storing and processing of data in accordance with a generic object model (Fig. 5), wherein the object model has at least one first element which corresponds to the type Object (Fig. 4-5), the method comprising: providing a unique identification of an object of the type Object for absolute referencing (interpreted to include the "primary key", Col. 12, Line 58) of the object (interpreted to include "CustomerID", Fig. 14); providing a logical name for labeling the object (interpreted to include "Base Object Name", Fig. 14); and linking the object to a second element (interpreted to include "SalesPersonID", Fig. 14), which corresponds to a type Feature (interpreted to include "Employee_ID", Fig. 15), wherein the type Feature (interpreted to include "Employee_ID", Fig. 15) comprising: a unique name in relation to the linked object (interpreted to include "Base Object Name", Fig. 15), and the option of linkage to further components of type Object (interpreted to include "JOB_ID", Col. 60, Lines 55-60), to further components of type Feature (interpreted to include "LOCATION_ID", Col. 60, Lines 50-65) and to data (interpreted to include "HIRE_DATE", Col. 60, Lines 50-65).

Regarding claim 24, Williams teaches the method in accordance, wherein the data are structured (Col. 91, Lines 55), stored (Col. 60, Lines 40-45), and processed (Fig. 3, item 34) for engineering an automation system. (Col. 9, Lines 23-24, Lines 37-38; Col. 12, Lines 43-45)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 11, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams, US Patent 6,591,272 B1, filed 22 Feb. 2000 in view of Devarakonda et al., US Pre-Grant Pub. No/ 2003/0225801 A1, filed 31 May 2002, hereinafter Devarakonda.

Regarding claims 10 and 11, Williams teaches the system in accordance, wherein elements linked by an element of type Feature.

Williams does not explicitly teach form a logical subset of all elements of an object.

However, Devarakonda teaches form a logical subset of all elements of an object. [0035]

Williams and Devarakonda are analogous art. A skilled artisan would have been motivated to adapt the data structure...“with requirements for storing data” as discussed in the abstract of Devarakonda.

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Therefore at the time of invention, it would have been obvious to a person having ordinary skill in the art to combine the teachings of Williams and Devarakonda to adapt the data structure with requirements for storing data as suggested in the abstract of Devarakonda.

Regarding claim 14, Williams teaches the system in accordance, wherein the elements of the object are linked by references. (Col. 11, Line 45; Col. 52, Lines 62-67; Col. 53, Lines 5-15)

See remarks under claim 10.

Regarding claim 18, Williams teaches the system in accordance, wherein the object model is described by an extensible markup language. (interpreted to include "XML", Col. 9, Lines 22-23)

See remarks under claim 10.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Wong whose telephone number is 571-270-1015. The examiner can normally be reached on Mon.-Thur. 8AM - 5:30PM and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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